

REMARKS

Claims 1-2 and 4-8 have been amended. No claims have been deleted, and new claims 9-11 have been added. Claim 8 has been allowed, and has been amended merely to correct informalities. Accordingly, claims 1-11 are now pending in this application.

Priority

Applicants appreciate the Examiner's acknowledgment of the claim for priority and receipt of the priority document.

35 U.S.C. §102

Claims 1-7 were rejected under 35 U.S.C. §102(e) as being anticipated by US Patent No. 6,615,364 to Nagasuka et al. In response, Applicants would like to emphasize the differences between Nagasuka et al. and the pending claims of the present application in their current form. Under the present invention, when the utilization ratio of the main storage becomes high, or when an occurrence of a failure in the computer system is detected, and if the content of the virtual-storage area is allocated to the main storage, the content of the virtual-storage area is transferred from the

main storage to the auxiliary storage to which the content of the virtual-storage area is allocated. As discussed in detail below, Nagasuka et al. do not teach or reasonably suggest such a result.

Discussion of Cited Reference

Nagasuka et al. describe a main memory 400 corresponding to the main storage of the claims of the present invention, a primary paging device unit 710 corresponding to the auxiliary storage of the claims of the present invention, and a separate external storage device 800. (See, e.g., Fig. 4 of Nagasuka et al.)

Further, Nagasuka et al. disclose "outputting data in the main memory 400 in an area having a small access frequency to the paging device unit when a use factor of the main memory 400 becomes high and an empty area becomes small." (See, col. 3. lines 48 to 52 of Nagasuka et al.)

Additionally, Nagasuka et al. disclose that "the main memory information acquiring process 440 is a process of acquiring the contents held in the main memory 400 sequentially in an ascending order starting from an address 0 and outputting the contents to the dump file 810, when fault

occurs in the system." (See, col. 3, lines 56 to 60 of Nagasuka et al.)

Furthermore, Nagasuka et al. disclose that "in accordance with the input information, the virtual memory information acquiring process 460 acquires page data in the virtual memory 900 paged out into the paging device unit 710 and outputs the page data to the dump file 801, when the fault occurs in the computer system." (See, col. 5, lines 4 to 9 of Nagasuka et al.)

In other words, the cited patent to Nagasuka et al. describes outputting the data in the main memory 400 to the paging device 710 when a utilization ratio of the main memory 400 becomes high, and outputting the contents held in the main memory 400 to the dump file 810 of the external storage unit 800 and the contents (page data) of the paging unit 710 to the dump file 810 of the external storage unit 800 when a fault occurs in the computer system.

Comparison Between the Present Invention and Cited Reference

In Nagasuka et al., "data in an area having a small access frequency when a utilization ratio of the main memory 400 becomes high and an empty area becomes small" and "page

data in the virtual memory 900 paged out into the paging device unit 710" correspond to "the content of said virtual-storage area on said main storage when the a utilization ratio of the main storage becomes high" of claims 1-7 of the present invention.

Furthermore, "the contents held in the main memory 400 when a fault occurs in the system" of the cited invention by Nagasuka et al. corresponds to "the content of the virtual-storage area if the content in the virtual-storage area is allocated to the main storage when occurrence of a failure in said computer system is detected" in claims 1-7 of the present invention.

However, Nagasuka et al. disclose that, when a fault occurs in the system, the contents of the main memory 400 are output to the external memory 800 different from the paging device 710, which contains the contents of the main memory 400 when the use factor of the main memory 400 becomes high. Thus, Nagasuka et al. do not disclose that when occurrence of a failure in the computer system is detected, if the content of the virtual-storage area is allocated to the main storage, the content of the virtual-storage area is output from the main storage to the auxiliary storage to which the content of

said virtual-storage area is allocated when the utilization ratio of the main storage becomes high, as set forth in claims 1, and 4-7 of the present application.

Accordingly, independent claims 1, and 4 to 7 are not anticipated by the cited invention of Nagasuka et al., or the other art of record, taken singly, or in combination. Thus, claims 1-7, as amended, are considered to be allowable.

Discussion of New Claims

New claim 9 is an apparatus claim corresponding to allowed method claim 8. Accordingly, claim 9 is believed to be allowable as being directed to similar subject matter as allowed claim 8.

New claims 10 and 11 are directed to subject matter similar to amended independent claims 1 and 4-7. Under claims 10 and 11, dump information in the virtual-storage area when a failure occurs is a combination of: (1) information output from the main storage to an auxiliary storage when the utilization ratio of the main storage becomes high; and (2) information output from the main storage to the auxiliary storage when the failure occurs. Neither Nagasuka et al., nor the other art of record teaches a system in which information

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resulting from both events in the main storage is stored to the same auxiliary storage. Accordingly, claims 10 and 11 are believed to be allowable.

Conclusion

In view of the foregoing amendments and remarks, Applicants contend that the above-identified application is now in condition for allowance. Accordingly, reconsideration and reexamination is requested.

Respectfully submitted, .

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